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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,572	04/03/2001	Norman Latov	0575/64075/JPW/BJA	2834

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EXAMINER	
CHIN, CHRISTOPHER L	
ART UNIT	PAPER NUMBER

1641
DATE MAILED: 12/20/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/825,572

Applicant(s)
Latov et al

Examiner
Chris L. Chin

Art Unit
1641



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 20, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) 2, 3, 5, 8, 15-19, 21, and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6, 7, 9-14, 20, and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 & 6 6) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Species (B) - gangliosides (claims 4, 9, 10, and 17) in Paper No. 8 is acknowledged. The traversal is on the ground(s) that species (A) and (B) are not independent. Species (A) and (B) are related in that they are drawn to similar compounds, compositions, and methods of use. All of the methods relate to detecting antibodies in a solution. Applicants further argue that there is no serious burden on the Examiner if restriction were not required. This is not found persuasive because species (A) and (B) are nevertheless different compounds that require different search strategies.

The requirement is still deemed proper and is therefore made FINAL.

Claims 2, 3, 5, 8, 15-19, 21, and 22 are non-elected claims.

Claim Rejections - 35 U.S.C. § 112

2. Claims 1, 4, 6, 7, 9-14, 20, and 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is vague. In line 7, the recitation of "the change" lacks antecedent support.

Claim 9 is vague because it depends from non-elected claim 8.

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Claim 20 is vague. In line 1, the recitation of "the optical signal size" lacks antecedent support. In line 4, the recitation of "the secondary antibody" lacks antecedent support.

3. Claims 23-26 provide for the use of the method of claim 1, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 23-26 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1, 11, 12, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Malmqvist et al.

Malmqvist et al (US Patent 5,492,840) discloses a sensor unit and method of assay that uses surface plasmon resonance. The sensor unit comprises a glass plate that has been coated with a thin film of metal, such as silver or gold. The metal film is coated with an organic polymer or hydrogel forming a basal surface which contains functional groups for binding of desired specific binding reagents, such as antibodies or antigens. The hydrogel can be carboxymethyl derivatives of dextran (col. 4, lines 5-67).

6. Claims 1, 11, 12, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Fagerstam et al.

Fagerstam et al (*Journal of Chromatography*, 597 (1992), pp 397-410) discloses a system for biospecific interaction analysis in which surface plasmon resonance (SPR) detection is combined with a dextran-modified sensor chip to which one of the components of the interaction under study can be covalently attached (page 398, left column). The sensor chip has a layer of carboxymethylated dextran on its surface for immobilization of antigens or antibodies (page 400).

7. Claims 1, 4, 9, 10, 11, 12, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Catimel et al.

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Catimel et al (*Glycobiology*, vol. 8(9), 1998, pp. 927-938) discloses an immobilization technique to investigate interactions between immobilized gangliosides (GD3, GM1, and GM2) and their respective antibodies, antibody fragments, or binding partners using an optical biosensor. Immobilization was performed by direct injection onto a carboxymethyl dextran sensor chip and did not require derivitization of the sensor surface or the ganglioside. The ganglioside appeared to bind to the sensor surface by hydrophobic interaction, leaving the carbohydrate epitope available for antibody binding (see page 927, left column). The sensor chip is designed for surface plasmon resonance (page 928, left column). The surface of the sensor chip also has a control blank channel with appropriate controls (see page 929).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Chin whose telephone number is (703) 308-3991. The examiner can normally be reached on Monday-Thursday from 10:00 am to 7:30 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le, can be reached on (703) 305-3399. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



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